FIG. 1

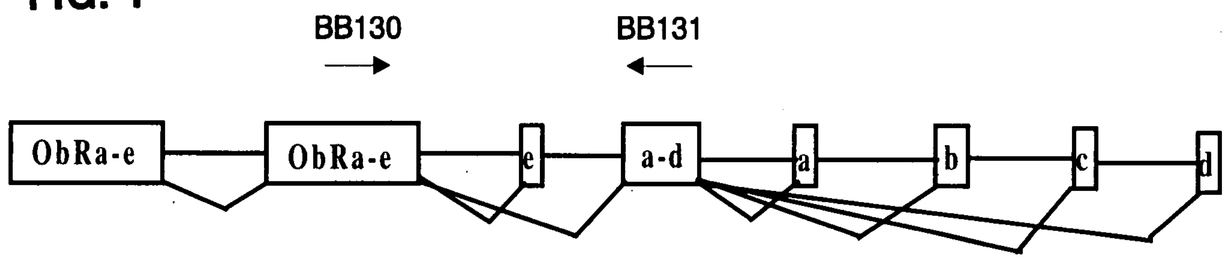

FIG. 2A

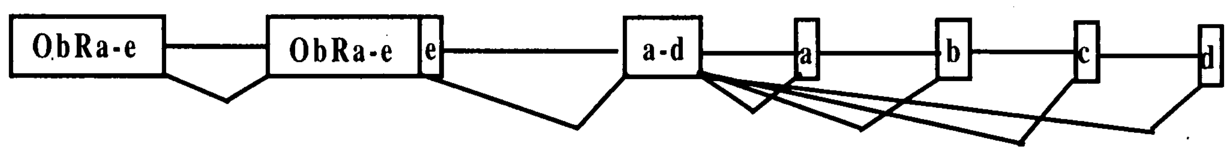

FIG. 2B

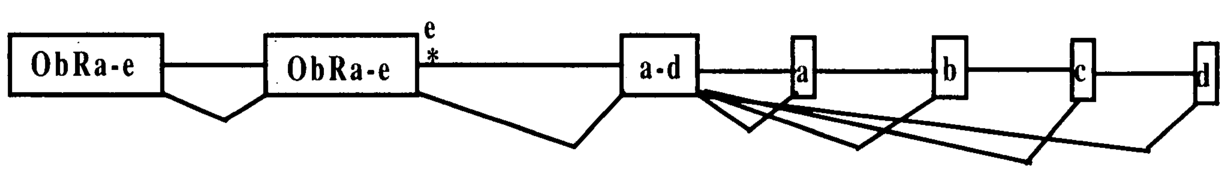

FIG. 3A

Sequence across the mouse intron-exon border:

aatgttaaaaagtttcacatccac**ggtatgtgtactgtacttttcatggattag**
N V K K F H I H **G M C T V L F M D ***

Sequence across the human intron-exon border:

tctgttaagaagtattatatccat**ggtaagtttactatactttag**
S V K K Y Y I H **G K F T I L ***

FIG. 3B

Mouse Ob-Re: **ggtatgtgtactgtacttttcatggat**
Human Ob-Re: **ggtaagtttactatactt**

Mouse Ob-Re: **G M C T V L F M D**
Human Ob-Re: **G K F T I L**

FIG. 4A

```
   1  ATGATTTGTCAAAAATTCTGTGTGGTTTTGTTACATTGGGAATTTATTTATGTGATAACT   60
  61  GCGTTTAACTTGTCATATCCAATTACTCCTTGGAGATTTAAGTTGTCTTGCATGCCACCA  120
 121  AATTCAACCTATGACTACTTCCTTTTGCCTGCTGGACTCTCAAAGAATACTTCAAATTCG  180
 181  AATGGACATTATGAGACAGCTGTTGAACCTAAGTTTAATTCAAGTGGTACTCACTTTTCT  240
 241  AACTTATCCAAAACAACTTTCCACTGTTGCTTTCGGAGTGAGCAAGATAGAAACTGCTCC  300
 301  TTATGTGCAGACAACATTGAAGGAAAGACATTTGTTTCAACAGTAAATTCTTTAGTTTTT  360
 361  CAACAAATAGATGCAAACTGGAACATACAGTGCTGGCTAAAAGGAGACTTAAAATTATTC  420
 421  ATCTGTTATGTGGAGTCATTATTTAAGAATCTATTCAGGAATTATAACTATAAGGTCCAT  480
 481  CTTTTATATGTTCTGCCTGAAGTGTTAGAAGATTCACCTCTGGTTCCCCAAAAAGGCAGT  540
 541  TTTCAGATGGTTCACTGCAATTGCAGTGTTCATGAATGTTGTGAATGTCTTGTGCCTGTG  600
 601  CCAACAGCCAAACTCAACGACACTCTCCTTATGTGTTTGAAAATCACATCTGGTGGAGTA  660
 661  ATTTTCCAGTCACCTCTAATGTCAGTTCAGCCCATAAATATGGTGAAGCCTGATCCACCA  720
 721  TTAGGTTTGCATATGGAAATCACAGATGATGGTAATTTAAAGATTTCTTGGTCCAGCCCA  780
 781  CCATTGGTACCATTTCCACTTCAATATCAAGTGAAATATTCAGAGAATTCTACAACAGTT  840
 841  ATCAGAGAAGCTGACAAGATTGTCTCAGCTACATCCCTGCTAGTAGACAGTATACTTCCT  900
 901  GGGTCTTCGTATGAGGTTCAGGTGAGGGGCAAGAGACTGGATGGCCCAGGAATCTGGAGT  960
 961  GACTGGAGTACTCCTCGTGTCTTTACCACACAAGATGTCATATACTTTCCACCTAAAATT 1020
1021  CTGACAAGTGTTGGGTCTAATGTTTCTTTTCACTGCATCTATAAGAAGGAAAACAAGATT 1080
1081  GTTCCCTCAAAAGAGATTGTTTGGTGGATGAATTTAGCTGAGAAAATTCCTCAAAGCCAG 1140
1141  TATGATGTTGTGAGTGATCATGTTAGCAAAGTTACTTTTTTCAATCTGAATGAAACCAAA 1200
1201  CCTCGAGGAAAGTTTACCTATGATGCAGTGTACTGCTGCAATGAACATGAATGCCATCAT 1260
```

FIG. 4B

1261	CGCTATGCTGAATTATATGTGATTGATGTCAATATCAATATCTCATGTGAAACTGATGGG	1320
1321	TACTTAACTAAAATGACTTGCAGATGGTCAACCAGTACAATCCAGTCACTTGCGGAAAGC	1380
1381	ACTTTGCAATTGAGGTATCATAGGAGCAGCCTTTACTGTTCTGATATTCCATCTATTCAT	1440
1441	CCCATATCTGAGCCCAAAGATTGCTATTTGCAGAGTGATGGTTTTTATGAATGCATTTTC	1500
1501	CAGCCAATCTTCCTATTATCTGGCTACACAATGTGGATTAGGATCAATCACTCTCTAGGT	1560
1561	TCACTTGACTCTCCACCAACATGTGTCCTTCCTGATTCTGTGGTGAAGCCACTGCCTCCA	1620
1621	TCCAGTGTGAAAGCAGAAATTACTATAAACATTGGATTATTGAAAATATCTTGGGAAAAG	1680
1681	CCAGTCTTTCCAGAGAATAACCTTCAATTCCAGATTCGCTATGGTTTAAGTGGAAAAGAA	1740
1741	GTACAATGGAAGATGTATGAGGTTTATGATGCAAAATCAAAATCTGTCAGTCTCCCAGTT	1800
1801	CCAGACTTGTGTGCAGTCTATGCTGTTCAGGTGCGCTGTAAGAGGCTAGATGGACTGGGA	1860
1861	TATTGGAGTAATTGGAGCAATCCAGCCTACACAGTTGTCATGGATATAAAAGTTCCTATG	1920
1921	AGAGGACCTGAATTTTGGAGAATAATTAATGGAGATACTATGAAAAAGGAGAAAAATGTC	1980
1981	ACTTTACTTTGGAAGCCCCTGATGAAAAATGACTCATTGTGCAGTGTTCAGAGATATGTG	2040
2041	ATAAACCATCATACTTCCTGCAATGGAACATGGTCAGAAGATGTGGGAAATCACACGAAA	2100
2101	TTCACTTTCCTGTGGACAGAGCAAGCACATACTGTTACGGTTCTGGCCATCAATTCAATT	2160
2161	GGTGCTTCTGTTGCAAATTTTAATTTAACCTTTTCATGGCCTATGAGCAAAGTAAATATC	2220
2221	GTGCAGTCACTCAGTGCTTATCCTTTAAACAGCAGTTGTGTGATTGTTTCCTGGATACTA	2280
2281	TCACCCAGTGATTACAAGCTAATGTATTTTATTATTGAGTGGAAAAATCTTAATGAAGAT	2340
2341	GGTGAAATAAAATGGCTTAGAATCTCTTCATCTGTTAAGAAGTATTATATCCATGGTAAG	2400
2401	TTTACTATACTTTAG	2415

FIG. 5A

1	M	I	C	Q	K	F	C	V	V	L	L	H	W	E	F	I	Y	V	I	T	20
21	A	F	N	L	S	Y	P	I	T	P	W	R	F	K	L	S	C	M	P	P	40
41	N	S	T	Y	D	Y	F	L	L	P	A	G	L	S	K	N	T	S	N	S	60
61	N	G	H	Y	E	T	A	V	E	P	K	F	N	S	S	G	T	H	F	S	80
81	N	L	S	K	T	T	F	H	C	C	F	R	S	E	Q	D	R	N	C	S	100
101	L	C	A	D	N	I	E	G	K	T	F	V	S	T	V	N	S	L	V	F	120
121	Q	Q	I	D	A	N	W	N	I	Q	C	W	L	K	G	D	L	K	L	F	140
141	I	C	Y	V	E	S	L	F	K	N	L	F	R	N	Y	N	Y	K	V	H	160
161	L	L	Y	V	L	P	E	V	L	E	D	S	P	L	V	P	Q	K	G	S	180
181	F	Q	M	V	H	C	N	C	S	V	H	E	C	C	E	C	L	V	P	V	200
201	P	T	A	K	L	N	D	T	L	L	M	C	L	K	I	T	S	G	G	V	220
221	I	F	Q	S	P	L	M	S	V	Q	P	I	N	M	V	K	P	D	P	P	240
241	L	G	L	H	M	E	I	T	D	D	G	N	L	K	I	S	W	S	S	P	260
261	P	L	V	P	F	P	L	Q	Y	Q	V	K	Y	S	E	N	S	T	T	V	280
281	I	R	E	A	D	K	I	V	S	A	T	S	L	L	V	D	S	I	L	P	300
301	G	S	S	Y	E	V	Q	V	R	G	K	R	L	D	G	P	G	I	W	S	320
321	D	W	S	T	P	R	V	F	T	T	Q	D	V	I	Y	F	P	P	K	I	340
341	L	T	S	V	G	S	N	V	S	F	H	C	I	Y	K	K	E	N	K	I	360
361	V	P	S	K	E	I	V	W	W	M	N	L	A	E	K	I	P	Q	S	Q	380
381	Y	D	V	V	S	D	H	V	S	K	V	T	F	F	N	L	N	E	T	K	400
401	P	R	G	K	F	T	Y	D	A	V	Y	C	C	N	E	H	E	C	H	H	420

FIG. 5B

421	R	Y	A	E	L	Y	V	I	D	V	N	I	N	I	S	C	E	T	D	G	440
441	Y	L	T	K	M	T	C	R	W	S	T	S	T	I	Q	S	L	A	E	S	460
461	T	L	Q	L	R	Y	H	R	S	S	L	Y	C	S	D	I	P	S	I	H	480
481	P	I	S	E	P	K	D	C	Y	L	Q	S	D	G	F	Y	E	C	I	F	500
501	Q	P	I	F	L	L	S	G	Y	T	M	W	I	R	I	N	H	S	L	G	520
521	S	L	D	S	P	P	T	C	V	L	P	D	S	V	V	K	P	L	P	P	540
541	S	S	V	K	A	E	I	T	I	N	I	G	L	L	K	I	S	W	E	K	560
561	P	V	F	P	E	N	N	L	Q	F	Q	I	R	Y	G	L	S	G	K	E	580
581	V	Q	W	K	M	Y	E	V	Y	D	A	K	S	K	S	V	S	L	P	V	600
601	P	D	L	C	A	V	Y	A	V	Q	V	R	C	K	R	L	D	G	L	G	620
621	Y	W	S	N	W	S	N	P	A	Y	T	V	V	M	D	I	K	V	P	M	640
641	R	G	P	E	F	W	R	I	I	N	G	D	T	M	K	K	E	K	N	V	660
661	T	L	L	W	K	P	L	M	K	N	D	S	L	C	S	V	Q	R	Y	V	680
681	I	N	H	H	T	S	C	N	G	T	W	S	E	D	V	G	N	H	T	K	700
701	F	T	F	L	W	T	E	Q	A	H	T	V	T	V	L	A	I	N	S	I	720
721	G	A	S	V	A	N	F	N	L	T	F	S	W	P	M	S	K	V	N	I	740
741	V	Q	S	L	S	A	Y	P	L	N	S	S	C	V	I	V	S	W	I	L	760
761	S	P	S	D	Y	K	L	M	Y	F	I	I	E	W	K	N	L	N	E	D	780
781	G	E	I	K	W	L	R	I	S	S	S	V	K	K	Y	Y	I	H	G	K	800
801	F	T	I	L																	804

FIG. 6A

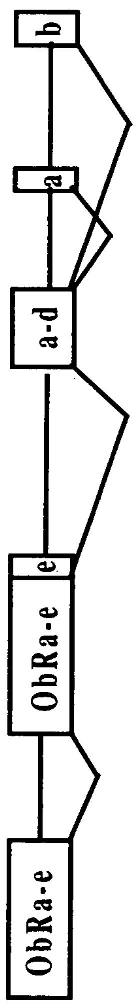

FIG. 6B

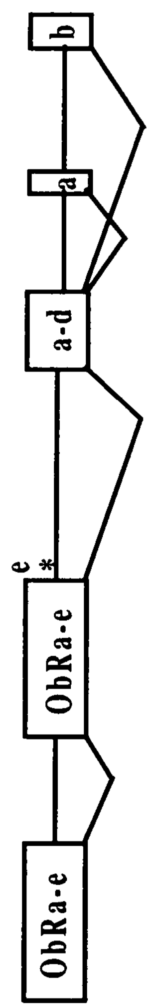

FIG. 7A

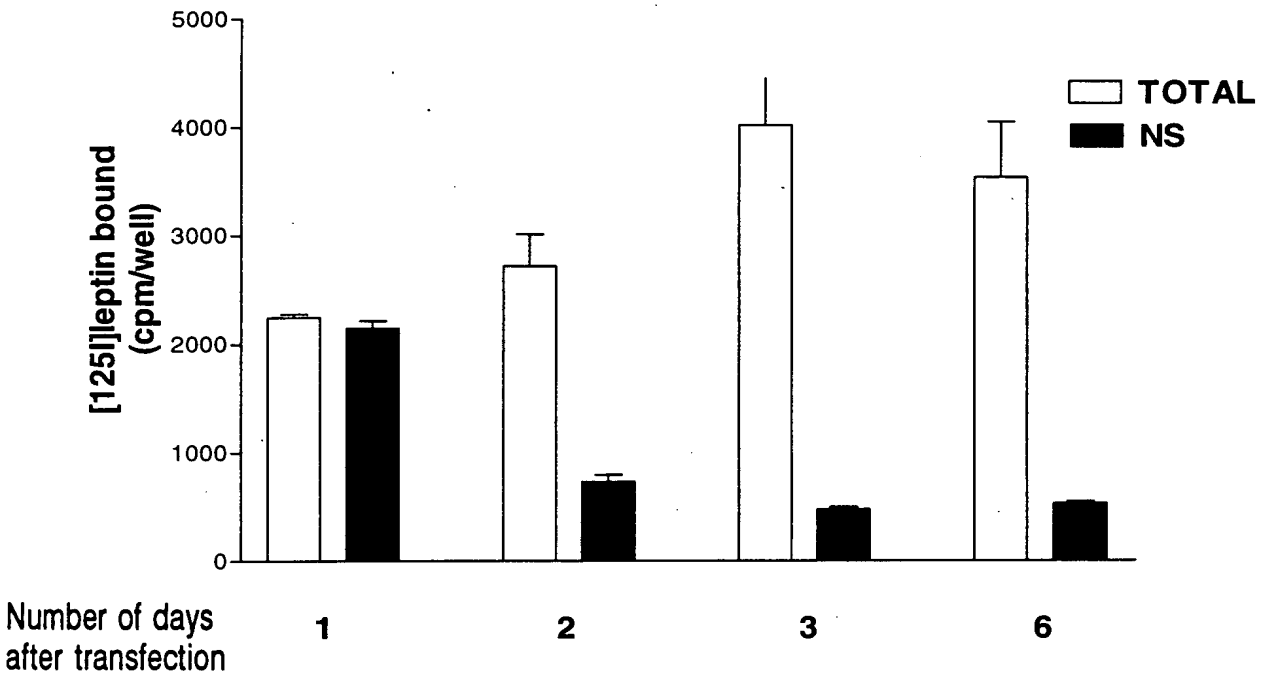

FIG. 7B

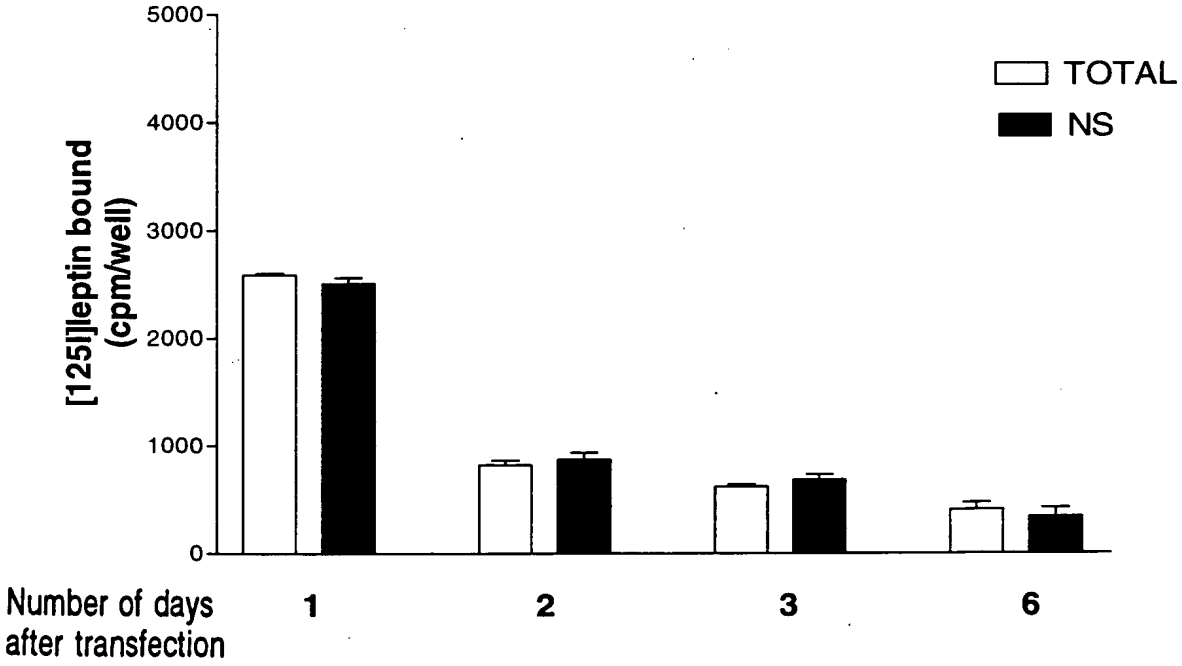

FIG. 7C

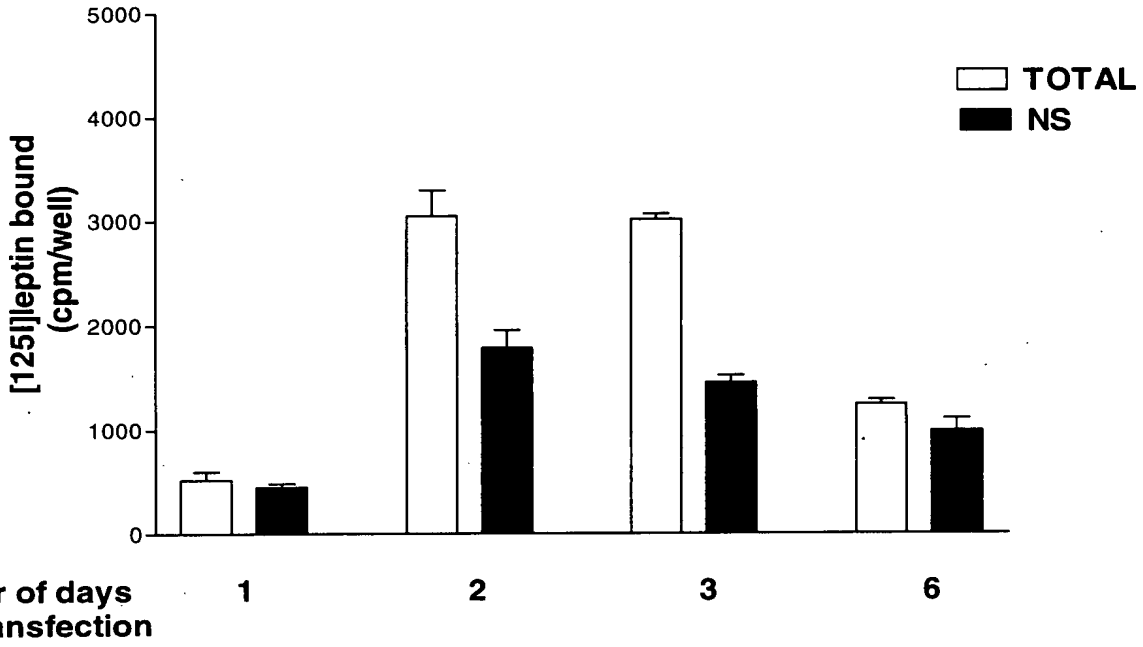

FIG. 7D

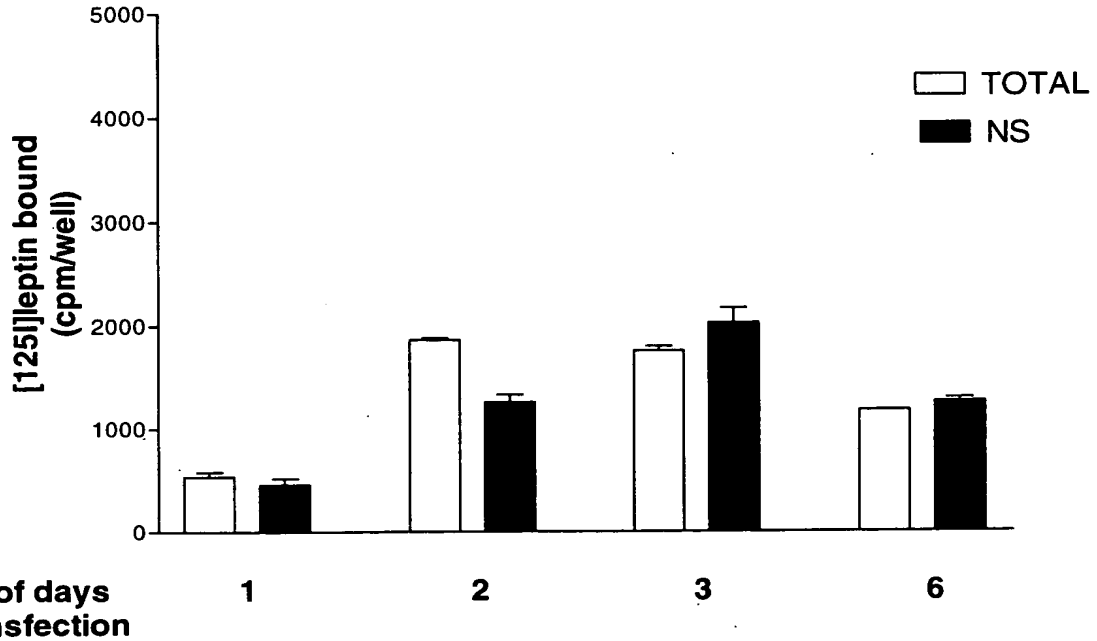

FIG. 8

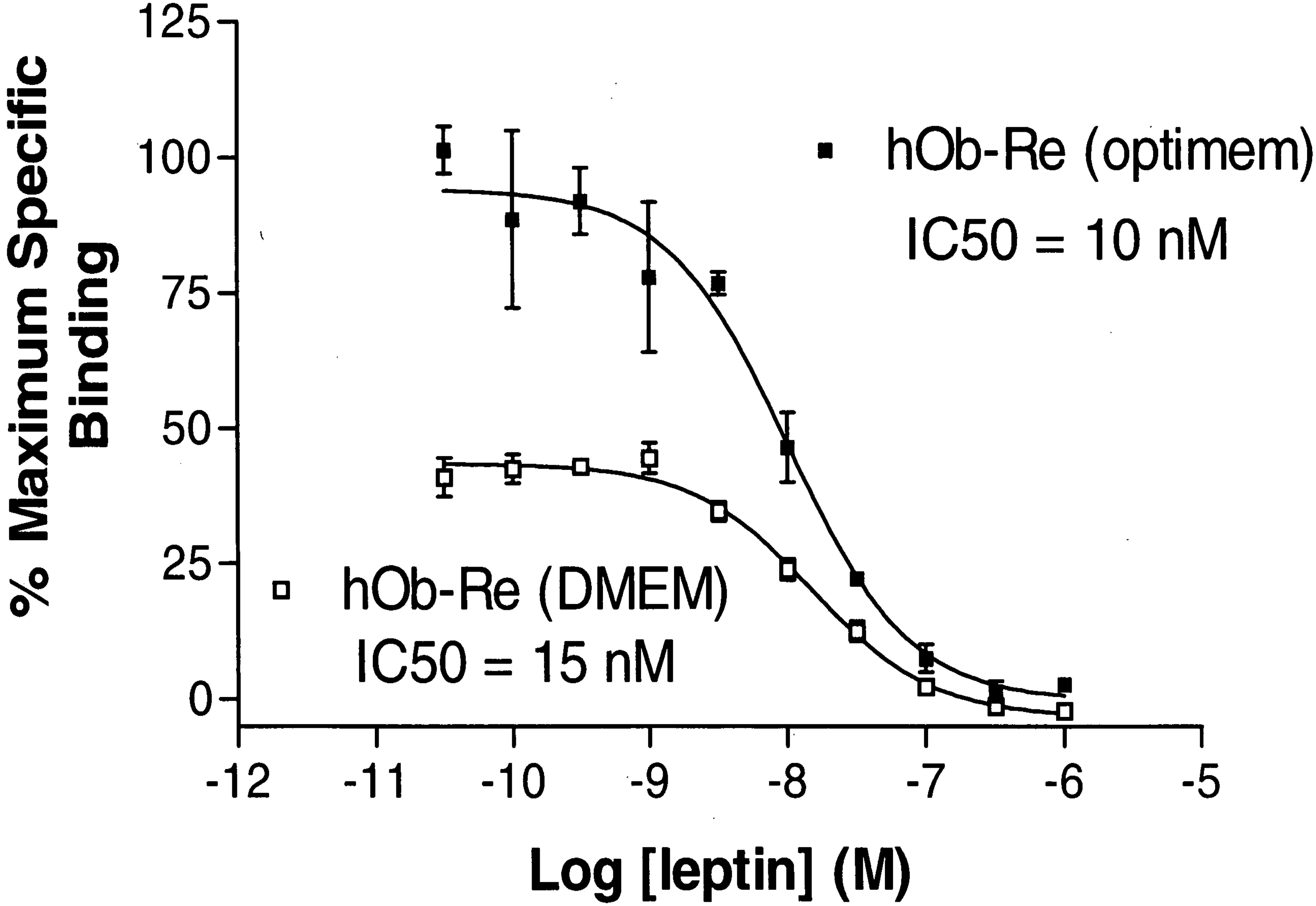

FIG. 9

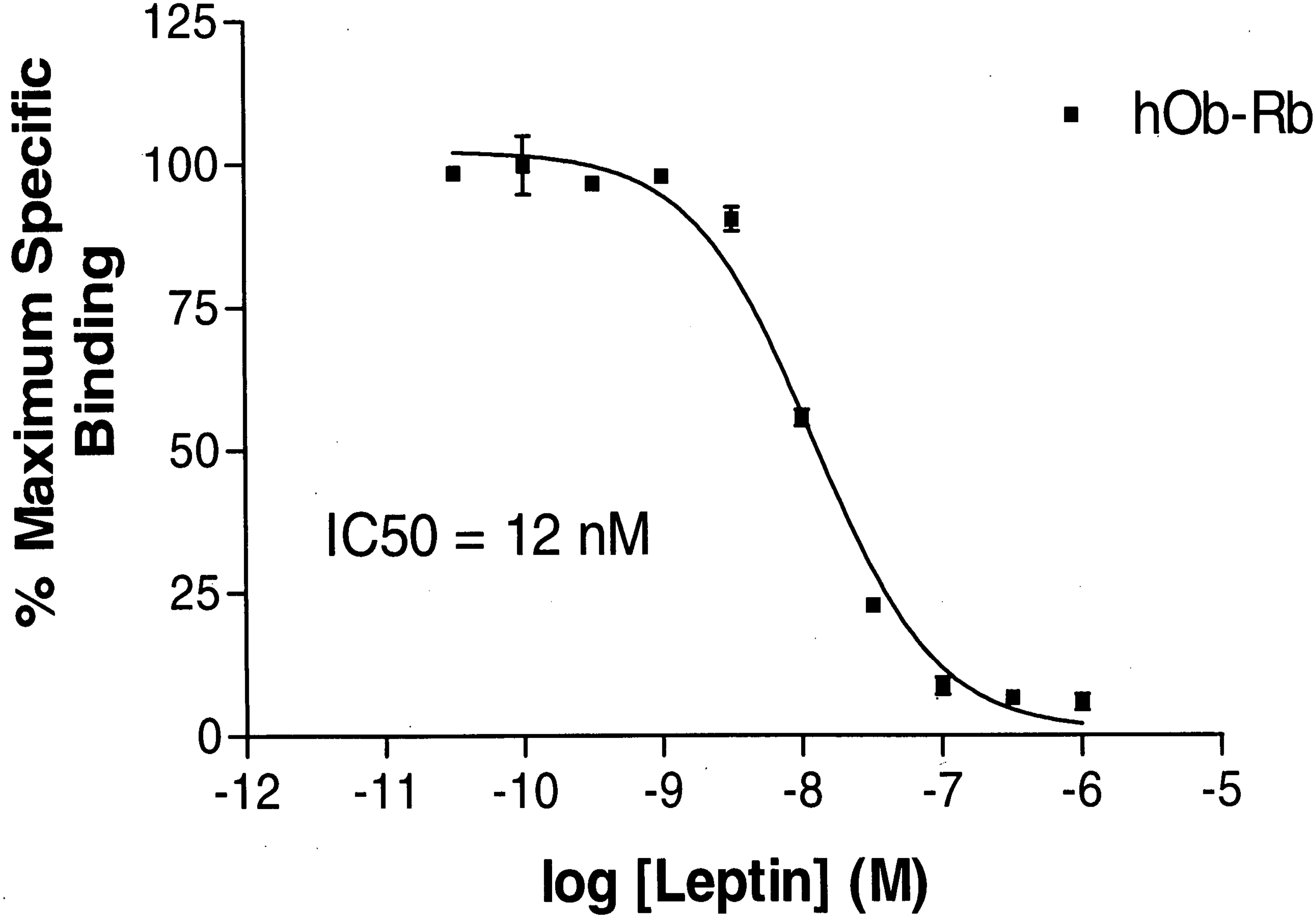

FIG. 10A

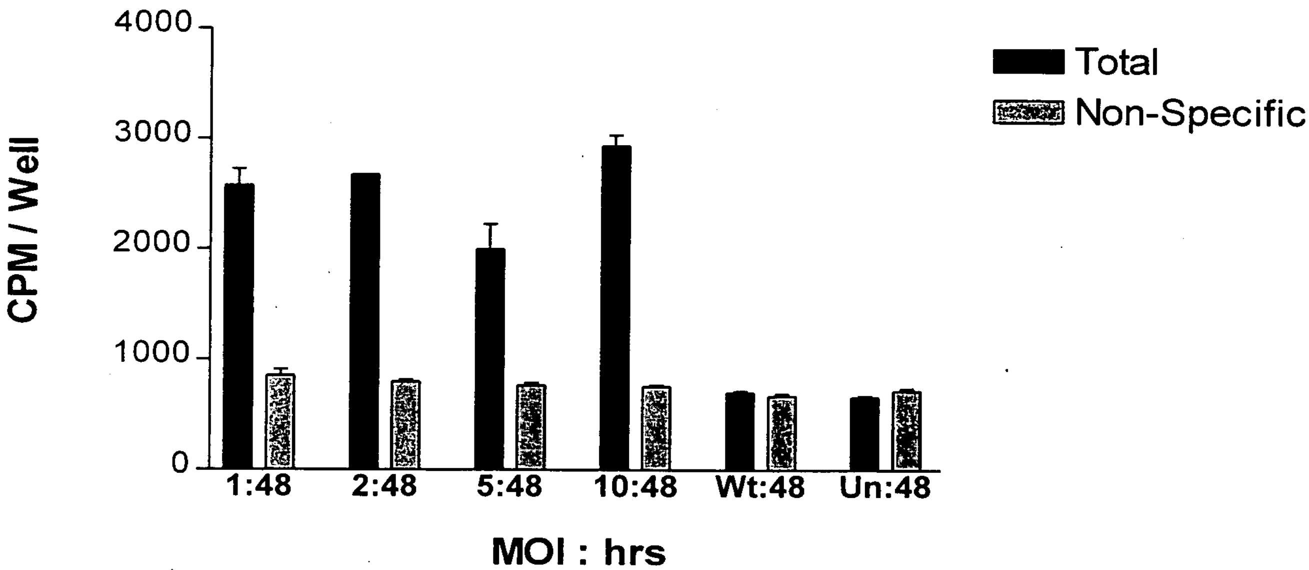

FIG. 10B

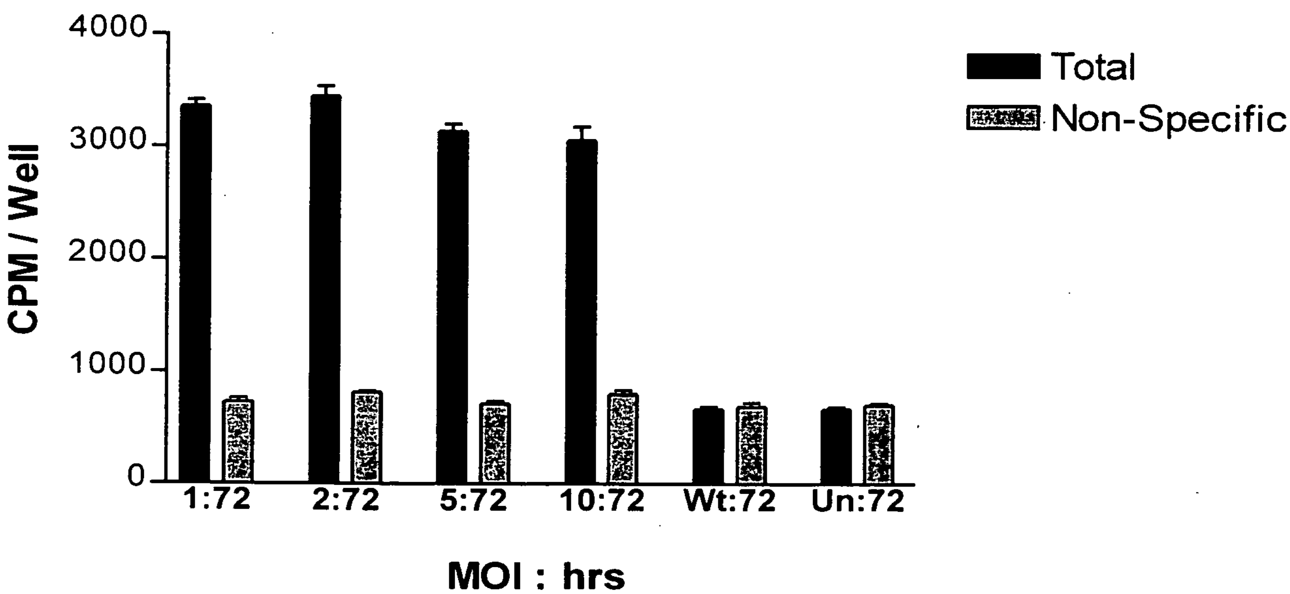

FIG. 10C

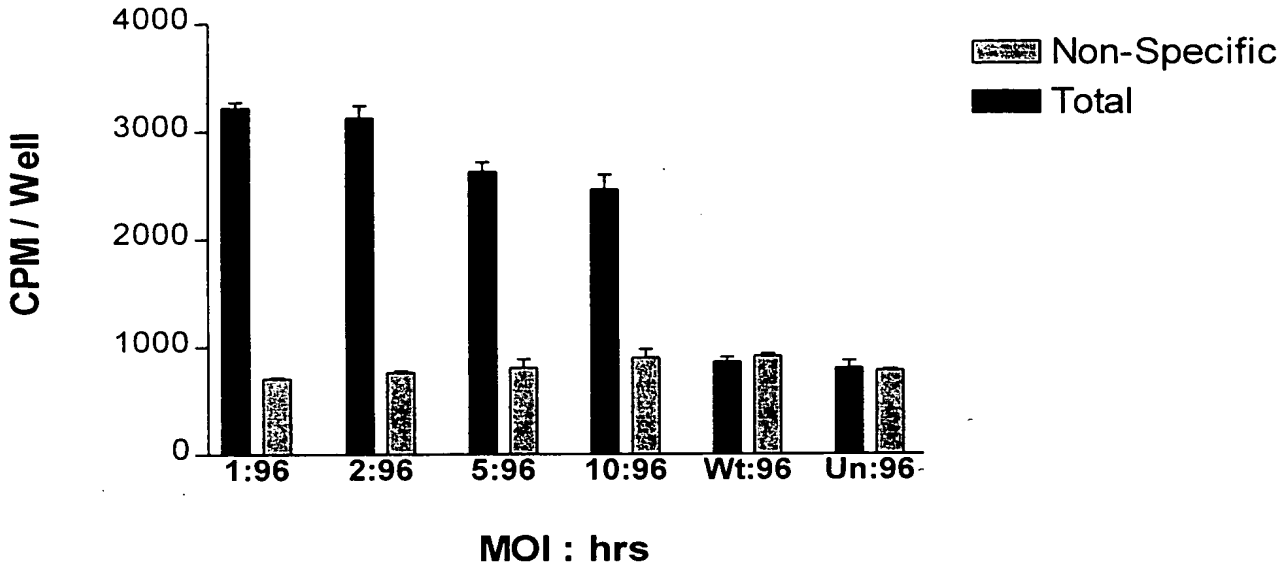

FIG. 10D

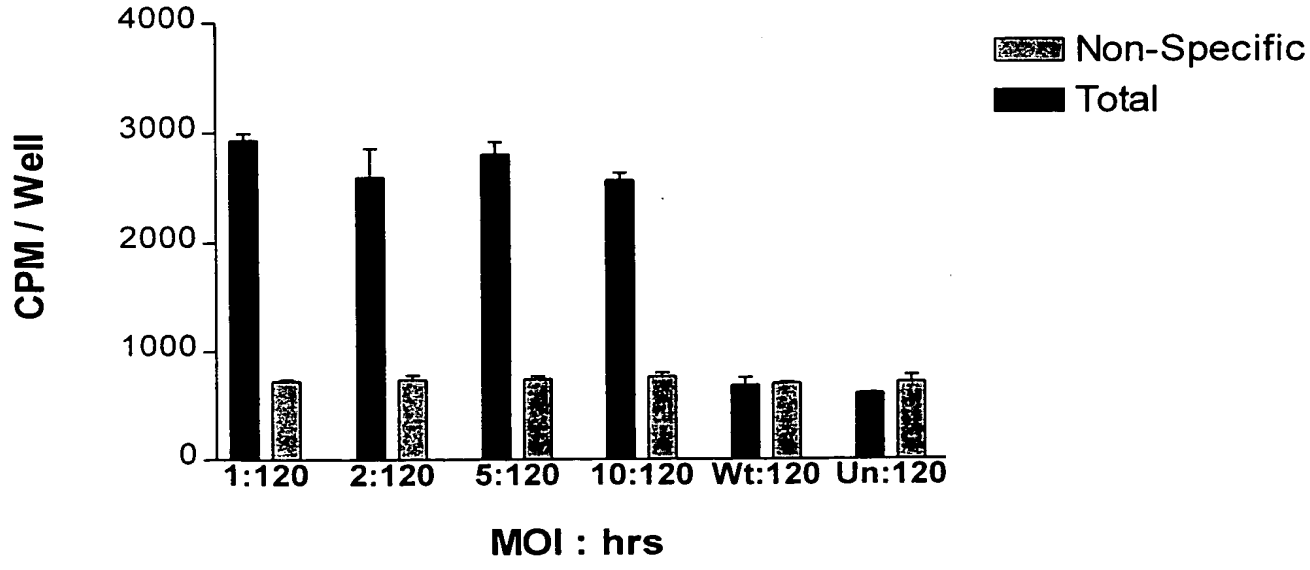

FIG. 11A

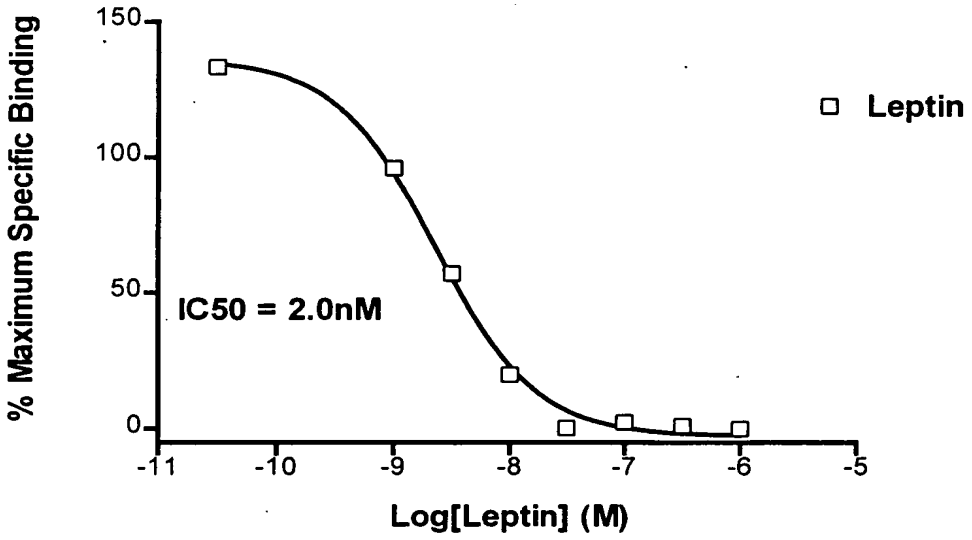

FIG. 11B